Headquarters
Utah Wing Civil Air Patrol
640 North 2360 West
Salt Lake City, Utah 84116

Utah Wing Supplement 1
CAPR 60-1 (E)
19 October 2005

Operations

CAP FLIGHT MANAGEMENT

CAPR 60-1 10 June 2004 is supplemented as follows:

1-1. Purpose and Scope. (Added)

Utah Wing Hot Air Balloon Flight Management

This supplement prescribes the responsibilities of all Civil Air Patrol Utah Wing (UTWG) personnel as applicable, to the control and management of Hot Air Balloon Flying Programs, aircraft, and aircrews. Federal Aviation Administration (FAA) requirements referred to in this supplement are minimum standards, and in some instances UTWG has established higher standards than FAA minimums. The objective of this supplement is to encourage safety, promote effective and efficient management, establish standardization, and provide effective supervision for UTWG hot air balloon flying activities. The practices, procedures, and standards prescribed in this supplement are mandatory. Suggestions for modifications and improvement of the UTWG hot air balloon flight management program should be forwarded through the chain of command to the Wasatch Squadron, except as noted below all aspects of CAPR 60-1 apply.

This supplement is published in accordance with CAPR 60-1 10 June, 2004, paragraph 1-3.c.

Chapter 2

General Operating Rules

2-1 General

b. Smoking is prohibited on and within 50 feet of hot air balloons and associated support equipment at all times.
c. Does not apply to UTWG Hot Air Balloon flight activities.
e. Does not apply to UTWG Hot Air Balloon flight activities. No restraint systems are provided.
f. Does not apply to UTWG Hot Air Balloon flight activities
g. This paragraph does not apply to UTWG Hot Air Balloon flight activities, instead chase crews will always be used, and a method of maintaining two-way communication between chase crews and balloon crews will be employed at all times.
j. Does not apply to UTWG Hot Air Balloon flight activities
k. Does not apply to UTWG Hot Air Balloon flight activities
o. Does not apply to UTWG Hot Air Balloon flight activities.

2-2 **Authorized Airfields**. This section in total does not apply to UTWG Hot Air Balloon flight activities. Wherever possible, balloon crews will obtain prior permission from landowner's before engaging in hot air flight activities. Hot air balloon aircrews will do everything possible to foster and maintain good relations with landowners.

2-4 Prohibited uses of CAP Aircraft.

n. Added. Training of senior member student pilots for a Hot Air Balloon rating is permitted.

2-6 **m-1** Does not apply to UTWG Hot Air Balloon flight activities.
m-3 Does not apply to UTWG Hot Air Balloon flight activities.

2-8 Pilot Records.

l. Added. Copies of UTWG form 5b establishing initial qualification and currency.

m. Added. Current copy of Hot Air Balloon Questionnaire (Attachment 4b).

2-14 Aircraft Information File. The file will be kept onboard the Balloon during flight or may be kept in the chase vehicle assigned to that balloon, at the discretion of the Pilot in Command.

m. Added. A copy of this supplement.

2-19 Operational Requirements and Restrictions.

a-1 The PIC will plan all flights so as to have a minimum of 30 minutes of fuel remaining (computed at normal fuel consumption per the POH). If it becomes evident the aircraft will not have that amount of fuel at the planned landing destination, the PIC will land as soon as possible with out threat of damage or injury.

c-1 The PIC will adhere to published FAA policy on ground proximity.

Chapter 3

Pilot Qualifications and Requirements

3-2 Pilot Qualifications.

c-3 Possess a Class III or higher medical certificate (not required for gliders or hot air balloons).

d-4 Possess a Class III or higher medical certificate (not required for gliders or hot air balloons).

e-2 Possess a Class III or higher medical certificate (not required for gliders or hot air balloons).

e-3 Possess a current FAA Commercial Certificate with an appropriate hot air rating.

i. Added. Hot Air Balloon Pilot. The following basic requirements must be met to be qualified as a UTWG Hot Air Balloon Pilot. Certificate and flight experience do not apply to student pilots under the supervision of a UTWG Hot Air Balloon Instructor.

1) Be an active senior member of the UTWG.
2) Posses a valid FAA private or commercial certificate including a lighter than air category and Hot Air Balloon class rating.
3) Satisfactorily complete a UTWG form 5b flight check in a hot air balloon with a UTWG Hot Air Balloon Check Pilot within the preceding 12 months.
4) Satisfactorily complete an annual UTWG Hot Air Balloon Questionnaire.

j. Added. Hot Air Balloon Instructor Pilot. The following requirements must be met to be qualified as a UTWG Hot Air Balloon Instructor Pilot.

1) Be an active UTWG Hot Air Balloon Pilot at least 21 years of age.
2) Posses a valid FAA commercial certificate including a lighter than air category and Hot Air Balloon class rating.
3) Have a minimum of 50 hours total Pilot In Command time in Hot Air Balloons or 25 hours PIC in Hot Air Balloons and 100 hours total PIC.
4) Be qualified and current in Hot Air Balloons.
5) Be designated in writing as a Hot Air Balloon Instructor Pilot by the Wing Commander.

k. Added. Hot Air Balloon Check Pilot. The following requirements must be met to be qualified as a UTWG Hot Air Balloon Check Pilot.

1) Be an active UTWG Hot Air Balloon Pilot at least 25 years of age.
2) Posses a valid FAA commercial certificate including a lighter than air category and Hot Air Balloon class rating.
3) Have a minimum of 50 hours total Pilot In Command time in Hot Air Balloons.
4) Be qualified and current in Hot Air Balloons
5) Be designated in writing as a Hot Air Balloon Instructor Pilot by the Wing Commander.

l. Added. Hot Air Balloon Cadet Orientation Pilot. The following requirements must be met to be designated as a UTWG Hot Air Balloon Cadet Orientation Pilot.

1) Be an active UTWG Hot Air Balloon Pilot at least 21 years of age.
2) Posses a valid FAA commercial certificate including a lighter than air category and Hot Air Balloon class rating.
3) Have a minimum of 50 hours total Pilot In Command time in Hot Air Balloons or 25 hours PIC in Hot Air Balloons and 100 hours total PIC.
4) Satisfactorily demonstrate a thorough knowledge of the *Cadet Flight Orientation Program Syllabus* (CAPF 77), to the extent that it applies it ballooning to a UTWG Hot Air Balloon Check Pilot.
5) Be designated in writing as a Hot Air Balloon Instructor Pilot by the Wing Commander.

3-3 d. Balloons.

Added. Hot Air Balloon Pilot. The following basic requirements must be met to be qualified as a UTWG Hot Air Balloon Pilot. Certificate and flight experience do not apply to student pilots under the supervision of a UTWG Hot Air Balloon Instructor.

1) Be an active senior member of the UTWG.
2) Posses a valid FAA private or commercial certificate including a lighter than air category and Hot Air Balloon class rating.
3) Satisfactorily complete a UTWG form 5b flight check in a hot air balloon with a UTWG Hot Air Balloon Check Pilot within the preceding 12 months.
4) Satisfactorily complete an annual CAPF 5 written examination.

3-5 Added. CAP Form 5 Flight Checks. UTWG Hot Air Balloon Pilots and Instructor Pilots must complete an initial and a required annual UTWG form 5B flight check in a hot air balloon with a qualified UTWG Hot Air Balloon Check Pilot or designated pilot using the current FAA Practical Test Standards for the certificate being exercised as a minimum level of proficiency. The Check Pilot must record this flight check in the pilot's logbook

3-6 CAP Pilot Flight Training Leading to an Additional Airman Rating or Certificate.

Added. g. CAP Senior member pilots are authorized flight training leading to hot air balloon rating, an airman rating or certificate in hot air balloons by CAP Hot Air Balloon Instructor Pilot.

Added. h. UTWG senior members who are current and active CAP private, commercial or ATP rated pilots or are authorized for flight training in hot air balloons by UTWG. Hot Air Balloon Instructor Pilots leading to a Lighter Than Air (LTA) category and Hot Air Balloon class (use mission symbol C17) UTWG Hot Air Balloon Pilots are authorized for instruction leading to a commercial certificate in the LTA category and Hot Air Balloon class (use mission symbol C17)

Chapter 4
Flight Release of CAP Aircraft

4-2 Added. Flight Release on CAP Corporate Missions. UTWG Hot Air Balloon flight activities may only be conducted under "C" mission symbol and may only be released by an authorized Flight Release Officer.

Attachment 10
Mission Symbols

Added

Note 3: UTWG Hot Air Balloon flight activities may only be conducted under mission symbol C17.

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Submitted – Approval pending

NHQ CAP/DO

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Attachment 4b
Hot Air Balloon Questionnaire

Name	Grade	CAPSN	Unit	Date
Check Pilot	Grade	CAPSN	Score	Type/Model Acft

Complete this open book questionnaire using the *Flight Manual/Pilots Operating Handbook.* The check pilot will review and grade the questionnaire. Minimum passing score is 80%. The completed questionnaire will be filed in the pilot's flight records.

1) Where can information be found on the allowable damage to fabric and what are allowable damage limits?

2) What items are required to be on board and operational before a flight is initiated?

3) What are the maximum launching and landing wind speeds as demonstrated in the Flight Manual for the balloon you flying?

4) What are the following envelope temperature limitations?
   a) Never exceed temperature.
   b) Maximum takeoff temperature.
   c) Maximum continuous temperature.

5) What is the maximum certified gross weight of the balloon system you will be flying?

6) What effects does the altitude and ambient temperature have on the lifting capacity of the balloon system?

7) What is "False Lift"?

8) What is the minimum burner pressure when flying with maximum gross weight?

9) Explain the procedure to relight the pilot light.

10) Explain how you would tell if a propane tank is full in a preflight check.

11) Except when necessary for takeoff or landing, what's the minimum safe altitude for a pilot to operate an aircraft anywhere?
   a) An altitude, if the power unit fails an emergency landing without undue hazard to persons or property on the surface.

b) An altitude of 500 feet above the surface and no closer than 500 feet to any person, vessel, vehicle or structure.
c) An altitude of 500 feet above the highest obstacle within a horizontal radius of 1,000 feet.

12) What is the operating fuel pressure (range) in which the balloon can be operated and why?

13) What minimum visibility and clearance from clouds are required for VFR operations in Class G airspace at 700 feet AGL or below during daylight hours?
a) 1 mile visibility and clear of clouds.
b) 1 mile visibility, 500 feet below, 1,000 feet above, and 2,000 feet horizontal clearance from clouds.
c) 3 miles visibility and clear of clouds.

14) When telephoning a weather briefing facility for preflight weather information, pilots should state
a) The full name and address of the pilot in command.
b) The takeoff point, destination, and type of aircraft.
c) The radio frequencies to be used.

15) Which type weather briefing should a pilot request, when departing within the hour, if no preliminary weather information has been received?
a) Outlook briefing.
b) Abbreviated briefing.
c) Standard briefing.

16) What is the weight of propane per gallon?

17) Where is the temperature tell-tale located on the balloon?

18) What should you do if a malfunction occurs on the main burner?

19) What if the main blast value will not shut-off?

20) When can nitrogen gas not be used to pressurize a fuel system?

21) When should oxygen be used? (Ref CFR 91.211)